

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A lithographic apparatus comprising:
 - an illumination system to provide a beam of radiation;
 - a support ~~structure~~ configured to support a patterning device, the patterning device serving to impart the beam of radiation with a pattern in its cross-section;
 - a substrate holder configured to hold a substrate;
 - a projection system to project said patterned beam of radiation onto a target portion of said substrate;
 - a positioning mechanism configured to position at least a portion of at least one of said support ~~structure~~, said substrate table, said projection system, and said illumination system;
 - a transmitter configured to transmit electromagnetic radiation; and
 - a first transducer configured to receive and convert said electromagnetic radiation into a power signal to power at least one of a sensor, an actuator and a control unit.
2. (Previously presented) The lithographic apparatus of Claim 1; wherein said electromagnetic radiation contains information and said first transducer is further configured to generate said power signal representing the information.
3. (Currently amended) The lithographic apparatus of Claim ~~[[2]]~~ 1, wherein said transmitter is located outside the lithographic apparatus.
4. (Currently amended) The lithographic apparatus of Claim ~~[[2]]~~ 1, wherein the lithographic apparatus further comprises an energy storage device constructed and arranged to receive said ~~at least one of a power signal and a control signal~~.
5. (Currently amended) The lithographic apparatus of Claim 2, ~~further comprising:~~
 - ~~[[a]] wherein said~~ sensor is configured to sense a state of at least one of said illumination system, said projection system, said patterning device, and said substrate and to

produce a first electric signal representing the state, and the lithographic apparatus further comprising

a second transducer configured to convert said first electric signal into electromagnetic radiation and to transmit the electromagnetic radiation,

wherein the lithographic apparatus is further arranged to co-operate with a receiver for receiving the electromagnetic radiation transmitted by the second transducer and converting it into a second electric signal.

6. (Original) The lithographic apparatus of Claim 5, wherein said transmitter and said receiver are integrated into a first transceiver, said first transceiver being constructed and arranged to transmit and receive said electromagnetic radiation.

7. (Original) The lithographic apparatus of Claim 6, wherein the transmitter and receiver are integrated into a second transceiver, the second transceiver being constructed and arranged to transmit and receive said electromagnetic radiation.

8. (Original) The lithographic apparatus of Claim 1, wherein the electromagnetic radiation contains information and wherein the lithographic apparatus further comprises an additional transducer that is arranged to generate a control signal representing the information.

9. (Currently Amended) A lithographic apparatus comprising:
an illumination system to provide a beam of radiation;
a support structure configured to support a patterning device, the patterning device serving to impart the beam of radiation with a pattern in its cross-section;
a substrate holder configured to hold a substrate;
a projection system to project said patterned beam radiation onto a target portion of said substrate; and
a wireless signaling system configured to transmit and receive information-bearing electromagnetic radiation,
wherein the information contained in said information-bearing electromagnetic radiation is used to power at least one of a sensor, an actuator and a control unit arranged in at

least a portion of ~~said~~ at least one of said support structure, said substrate table, said projection system, and said illumination system.

10. (Currently Amended) The lithographic apparatus of Claim 9, wherein said wireless signaling system comprises:

a transmitter configured to transmit said electromagnetic radiation; and

a first transducer configured to receive and convert said electromagnetic radiation into a first electrical signal containing the information which is used to power ~~said~~ at least one of ~~[[a]] said sensor, [[an]] said actuator and [[a]] said control unit arranged in said at least a portion of said at least one of said support structure, said substrate table, said projection system, and said illumination system.~~

11. (Original) The lithographic apparatus of Claim 10, further comprising an energy storage device constructed and arranged to receive said first electrical signal.

12. (Currently amended) The lithographic apparatus of Claim 10, wherein said ~~wireless signaling system further comprises:~~ a sensor is configured to sense a state of at least one of said illumination system, said projection system, said patterning device, and said substrate and to produce a second electric signal representing the state, and said wireless signaling system further comprises

a second transducer configured to convert said second electric signal into electromagnetic radiation and to transmit the electromagnetic radiation, and

a receiver for receiving the electromagnetic radiation transmitted by the second transducer and converting it into a third electric signal.

13. (Original) The lithographic apparatus of Claim 12, wherein said transmitter and said receiver are integrated into a first transceiver, said first transceiver being constructed and arranged to transmit and receive said electromagnetic radiation.

14. (Original) The lithographic apparatus of Claim 13, wherein the transmitter and receiver are integrated into a second transceiver, the second transceiver being constructed and arranged to transmit and receive said electromagnetic radiation.

15. (Currently Amended) A device manufacturing method, comprising:
~~providing a substrate;~~
providing a beam of radiation using an illumination system;
using a patterning device to impart the beam with a pattern in its cross-section;
projecting the patterned beam of radiation onto a target portion of the substrate; and
sensing a state of at least one of said illumination system, said projection system, said
patterning device, and said substrate with a sensor;
producing an electric signal representing the state;
converting said electric signal into electromagnetic radiation by a first transducer;
wirelessly transmitting said electromagnetic radiation to a receiver, and
~~wireless powering~~ wirelessly powering said sensor.
16. (Previously presented) A lithographic method comprising:
transmitting a beam of radiation through an illumination system;
patterning said beam of radiation with a patterning device;
projecting said patterned beam of radiation onto a substrate;
positioning at least one of said patterning device and said substrate relative to the
other to enable different portions of said substrate to be imaged; and
wirelessly powering at least one of a sensor, an actuator and a control unit used in
controlling at least one of said transmitting, patterning, projecting and said positioning.
17. (Currently Amended) A lithographic apparatus comprising:
an illumination system to provide a beam of radiation;
a support ~~structure~~ that supports a patterning device, the patterning device serving to
impart the beam of radiation with a pattern in its cross-section;
a substrate holder configured to hold a substrate;
a projection system that projects the patterned beam of radiation onto substrate; and
means for wirelessly powering at least one of a sensor, an actuator and a control unit
used in controlling at least one of said illumination system, said support ~~structure~~, said
substrate holder and said projection system.
18. (Previously presented) The lithographic method of Claim 16, further comprising
wirelessly controlling at least one of said transmitting, patterning, projecting and said
positioning.

19. (Previously presented) The lithographic apparatus of Claim 17, further comprising means for wirelessly interfacing with at least one of said illumination system, said support structure, said substrate holder and said projection system.